## WHAT IS CLAIMED IS:

- 1. A method for imaging relative elastic properties of tissue, the method comprising vibrating an area of tissue of interest and capturing a power Doppler image of at least part of the vibrating tissue.
- 2. A method as claimed in claim 1 further comprising capturing a B-scan image and using the B-scan image to compensate the power Doppler image.
- 3. A method as claimed in claim 2 wherein the B-scan image is captured simultaneously with the power Doppler image.
  - 4. A method as claimed in claim 1 comprising applying a probe to the patient's body, the probe being operable to cause vibration of the area of tissue of interest.

15

5

- 5. A method as claimed in claim 3, wherein the probe comprises an acoustic speaker.
- 6. A method as claimed in claim 4 wherein the probe comprises a tissue contact pad or disc for transferring vibrations to the area of tissue of interest.

20

7. A method as claimed in claim 2 comprising applying a probe to the patient's body, the probe being operable to cause vibration of the area of tissue of interest.

- 8. A method as claimed in claim 3 comprising applying a probe to the patient's body, the probe being operable to cause vibration of the area of tissue of interest.
- 9. A method as claimed in claim 5 wherein the probe comprises a tissue contact pad
  or disc for transferring vibrations to the area of tissue of interest.